

## **PCT**

REC'D 27 MAY 2004

## INTERNATIONAL PRELIMINARY EXAMINATION REPORTS

## (PCT Article 36 and Rule 70)

Applicant's or agent's file reference PU020380	FOR FURTHER ACTION		n of Transmittal of International tamination Report (Form PCT/IPEA/416)					
International application No.	International filing date (day/mor	nth/year)	Priority date (day/month/year)					
PCT/US03/25254	13 August 2003 (13.08.2003)		14 August 2002 (14.08.2002)					
International Patent Classification (IPC)	or national classification and IPC							
IPC(7): H04M 3/16 and US Cl.: 455/411	,408							
Applicant								
THOMSON LICENSING S.A.								
Examining Authority and i	ary examination report has bee s transmitted to the applicant a	ccording to Art	icle 36.					
2. This REPORT consists of	a total of $\frac{2}{5}$ sheets, including	this cover sheet	· •					
which have been amer before this Authority	This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).							
These annexes consist of a	total of $\bigcup$ sheets.							
<ol><li>This report contains indicate</li></ol>	tions relating to the following i	tems:						
I Basis of the report  II Priority  III Non-establishment of report with regard to novelty, inventive step and industrial applicability  IV Lack of unity of invention  V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement								
VI Certain documents cited								
VII Certain defects in the international application								
VIII Certain observati	VIII Certain observations on the international application							
Date of submission of the demand	Date	of completion o	f this report					
27 February 2004 (27.02.2004)	05 Ma	y 2004 (05.05.20	004)					
Name and mailing address of the IPEA/US  Mail Stop PCT, Attn: IPEA/US  Commissioner for Patents P.O. Box 1450  Alexandria, Virginia 22313-1450  Facsimile No. (703) 305-3230	Huy I	rized officer  O. Nguyen  one No. 703-30	gre Sorte-Riley 5-3283					
orm PCT/IPEA/409 (cover sheet)(July 19	98)							

PCT/US03/252	L	International application No. PCT/US03/252
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I.	asis of the report
	ith regard to the elements of the international application:*
	the international application as originally filed.
	the description:
	pages 1-7 as originally filed
	pages NONE , filed with the demand
	pages NONE, filed with the letter of
	the claims:
	pages 8-10 , as originally filed pages NONE , as amended (together with any statement) under Article 19
	pages NONE , as amended (together with any statement) are pages NONE , filed with the demand
	pages NONE, filed with the letter of
	the drawings: pages 1-3, as originally filed
	pages NONE filed with the demand
	pages NONE, filed with the letter of
	the sequence listing part of the description:
	pages NONE, as originally filed
	nages NONE , filed with the demand
	NONE filed with the letter Of
2	with regard to the language, all the elements marked above were available or furnished to this Authority in the
	with regard to the language, an the elements marked too the language, and the elements harked too the language in which the international application was filed, unless otherwise indicated under this item.  These elements were available or furnished to this Authority in the following language which is:
	These elements were available or luministed to this Authority in the restaurable search (under Rule 23 1(b)).
	the language of a translation furnished for the purposes of international search (under Rule23.1(b)).
	the language of publication of the international application (under Rule 48.3(b)).
	the language of the translation furnished for the purposes of international preliminary examination (under Rules
	55.2 and/or 55.3).  With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the
3	with regard to any nucleotite and/or annua actu sequence desired to any nucleotite and/or annual sequence desired to any nucleotite and/or any nucleotite and/or annual sequence desired to any nucleotite and any nucleotite any nucleotite and any nucleoti
	contained in the international application in printed form.
١	filed together with the international application in computer readable form.
l	furnished subsequently to this Authority in written form.
	furnished subsequently to this Authority in computer readable form.
ĺ	The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the
	international application as filed has been furnished.
	The statement that the information recorded in computer readable form is identical to the written sequence listing
l	has been furnished.
1	The amendments have resulted in the cancellation of:
	the description, pages None
1	the claims, Nos. None
	the drawings, sheets/fig None
	This report has been established as if (some of) the amendments had not been made, since they have been considered to go
1	the disclosure or filed as indicated in the Sunniemental Box (Rule 70.2(c)).
	ties to the bear furnished to the receiving Office in response to an invitation under Article 14 are rejerred to
	Replacement sheets which have been furnished to the receiving Office at responsion to the second amendments (Rules 70.16 and 70.17). s report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17). Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.
	Any replacement sneet containing such untertainents must be rejected to water



Internation No. PCT/US03123254

Claims NONE NO  Inventive Step (IS) Claims 1-14 YES  Claims NONE NO	Inventive Step (IS)  Claims NONE  Claims 1-14  Claims NONE  NO  Industrial Applicability (IA)  Claims 1-14  Claims NONE  NO  CITATIONS AND EXPLANATIONS  Claims 1, 7, and 14 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggestmethod for managing a session key used for enabling communications between a mobile terminal and an access point in a wireless cal area network ("WLAN"), comprising the steps of: ceiving a request for access to the WLAN from the mobile terminal; determining a virtual operator associated with the access quest; tablishing a first secure channel between the access point and the virtual operator; requesting user authentication from the virtual operator via the first secure annel, wherein the virtual operator communicates with the mobile terminal via a second secure channel to authenticate the mobile minal; selecting a session key arid sending the session key to the virtual operator via the first secure channel, wherein the virtual operator sends the session key to the mobile terminal via the second secure annel; and communicating with the mobile terminal using the session key. Claims 2-6 depend on claim 1. Claims 8-13 depend on claim 7.				
Inventive Step (IS)  Claims 1-14  Claims NONE  NO  Industrial Applicability (IA)  Claims 1-14  Claims NONE  NO  Industrial Applicability (IA)  Claims 1-14  Claims NONE  NO  Claims 1-7, and 14 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly sugges method for managing a session key used for enabling communications between a mobile terminal and an access point in a wireless real area network ("WLAN"), comprising the steps of: seciving a request for access to the WLAN from the mobile terminal; determining a virtual operator associated with the access equest; stablishing a first secure channel between the access point and the virtual operator; requesting user authentication from the virtual operator via the first secure namel, wherein the virtual operator communicates with the mobile terminal via a second secure channel to authenticate the mobile securing a session key arid sending the session key to the virtual operator via the first secure channel, wherein the virtual operator sends the session key to the mobile terminal via the second secure channel; and communicating with the mobile terminal using the session key. Claims 8-13 depend on claim 1. Claims 8-13 depend on claim 7.	Inventive Step (IS)  Claims NONE  Claims 1-14  Claims NONE  NO  Industrial Applicability (IA)  Claims 1-14  Claims NONE  NO  CITATIONS AND EXPLANATIONS  Claims 1, 7, and 14 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggestmethod for managing a session key used for enabling communications between a mobile terminal and an access point in a wireless cal area network ("WLAN"), comprising the steps of: ceiving a request for access to the WLAN from the mobile terminal; determining a virtual operator associated with the access quest; tablishing a first secure channel between the access point and the virtual operator; requesting user authentication from the virtual operator via the first secure annel, wherein the virtual operator communicates with the mobile terminal via a second secure channel to authenticate the mobile minal; selecting a session key arid sending the session key to the virtual operator via the first secure channel, wherein the virtual operator sends the session key to the mobile terminal via the second secure annel; and communicating with the mobile terminal using the session key. Claims 2-6 depend on claim 1. Claims 8-13 depend on claim 7.	Novelty (N)	Claims	1-14	YES
Industrial Applicability (IA)  Claims 1-14  Claims NONE  NO  CITATIONS AND EXPLANATIONS  Claims 1, 7, and 14 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly sugges method for managing a session key used for enabling communications between a mobile terminal and an access point in a wireless real area network ("WLAN"), comprising the steps of:  ceiving a request for access to the WLAN from the mobile terminal; determining a virtual operator associated with the access equest; stablishing a first secure channel between the access point and the virtual operator; requesting user authentication from the virtual operator via the first secure channel to authenticate the mobile terminal; selecting a session key arid sending the session key to the virtual operator via the first secure channel, wherein the virtual operator sends the session key to the mobile terminal via the second secure channel and communicating with the mobile terminal using the session key.  Claims 8-13 depend on claim 1.  Claims 8-13 depend on claim 7.	Inventive Step (IS)  Claims 1-14  Claims NONE  Industrial Applicability (IA)  Claims 1-14  Claims NONE  Claims NONE  Claims NONE  NO  CITATIONS AND EXPLANATIONS  Claims 1, 7, and 14 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggesmethod for managing a session key used for enabling communications between a mobile terminal and an access point in a wireless cal area network ("WLAN"), comprising the steps of: ceiving a request for access to the WLAN from the mobile terminal; determining a virtual operator associated with the access quest; tablishing a first secure channel between the access point and the virtual operator; requesting user authentication from the virtual operator via the first secure annel, wherein the virtual operator communicates with the mobile terminal via a second secure channel to authenticate the mobile minal; selecting a session key arid sending the session key to the virtual operator via the first secure channel, wherein the virtual operator sends the session key to the mobile terminal via the second secure annel; and communicating with the mobile terminal using the session key. Claims 2-6 depend on claim 1. Claims 8-13 depend on claim 7.	• • •			
Industrial Applicability (IA)  Claims  Claims	Industrial Applicability (IA)  Claims  Claims				
Industrial Applicability (IA)  Claims  Claims	Industrial Applicability (IA)  Claims  Claims	Inventive Step (IS)	Claims	1-14	YES
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Claims NONE  Claims 1, 7, and 14 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly sugges method for managing a session key used for enabling communications between a mobile terminal and an access point in a wireless real area network ("WLAN"), comprising the steps of: receiving a request for access to the WLAN from the mobile terminal; determining a virtual operator associated with the access equest; stablishing a first secure channel between the access point and the virtual operator; requesting user authentication from the virtual operator via the first secure namel, wherein the virtual operator communicates with the mobile terminal via a second secure channel to authenticate the mobile rminal; selecting a session key arid sending the session key to the virtual operator via the first secure channel, wherein the virtual operator sends the session key to the mobile terminal via the second secure namel; and communicating with the mobile terminal using the session key. Claims 2-6 depend on claim 1. Claims 8-13 depend on claim 7.	Claims NONE  CITATIONS AND EXPLANATIONS  Claims 1, 7, and 14 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly sugges method for managing a session key used for enabling communications between a mobile terminal and an access point in a wireless cal area network ("WLAN"), comprising the steps of: ceiving a request for access to the WLAN from the mobile terminal; determining a virtual operator associated with the access quest; tablishing a first secure channel between the access point and the virtual operator; requesting user authentication from the virtual operator via the first secure annel, wherein the virtual operator communicates with the mobile terminal via a second secure channel to authenticate the mobile minal; selecting a session key arid sending the session key to the virtual operator via the first secure channel, wherein the virtual operator sends the session key to the mobile terminal via the second secure annel; and communicating with the mobile terminal using the session key. Claims 2-6 depend on claim 1. Claims 8-13 depend on claim 7.				
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Claims 1, 7, and 14 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly sugges method for managing a session key used for enabling communications between a mobile terminal and an access point in a wireless cal area network ("WLAN"), comprising the steps of: ceiving a request for access to the WLAN from the mobile terminal; determining a virtual operator associated with the access quest; tablishing a first secure channel between the access point and the virtual operator; requesting user authentication from the virtual operator via the first secure fannel, wherein the virtual operator communicates with the mobile terminal via a second secure channel to authenticate the mobile firminal; selecting a session key arid sending the session key to the virtual operator via the first secure channel, wherein the virtual operator sends the session key to the mobile terminal via the second secure fannel; and communicating with the mobile terminal using the session key. Claims 2-6 depend on claim 1. Claims 8-13 depend on claim 7.	Claims 1, 7, and 14 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly sugges method for managing a session key used for enabling communications between a mobile terminal and an access point in a wireless cal area network ("WLAN"), comprising the steps of: ceiving a request for access to the WLAN from the mobile terminal; determining a virtual operator associated with the access quest; tablishing a first secure channel between the access point and the virtual operator; requesting user authentication from the virtual operator via the first secure annel, wherein the virtual operator communicates with the mobile terminal via a second secure channel to authenticate the mobile minal; selecting a session key arid sending the session key to the virtual operator via the first secure channel, wherein the virtual operator sends the session key to the mobile terminal via the second secure annel; and communicating with the mobile terminal using the session key. Claims 2-6 depend on claim 1. Claims 8-13 depend on claim 7.		Claims	NONE	NO
		minal; selecting a session key arid sending the se the first secure channel, wherein the virtu annel; and communicating with the mobile termi Claims 2-6 depend on claim 1.	ession key to the al operator send	virtual operator via s the session key to the mobile termin	
		NEW CITATIONS	*****		·
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Form PCT/IPEA/409 (Box V) (July 1998)